

C-1444

Sub. Code

90711

**P.G. DIPLOMA IN FIRE AND INDUSTRIAL SAFETY
EXAMINATION, NOVEMBER 2023.**

First Semester

**FIRE SAFETY – DESIGN, INSTALLATION AND
MAINTENANCE**

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Section A

(10 × 1 = 10)

Answer **all** questions.

1. Metals come under which class of Fire?
 - (a) Class B
 - (b) Class C
 - (c) Class D
 - (d) Class A
2. UEL Stands For
 - (a) Upper explosive Limit
 - (b) Upper expansion Limit
 - (c) Upper expand Limit
 - (d) Upper existing Limit
3. Expand AFFF
 - (a) Aqueous Forming Foam
 - (b) Aqueous Film Forming Foam
 - (c) Aqueous File Forming Foam
 - (d) None

4. _____ method used for fire extinguisher operation.
- (a) PSAS (b) PSSA
(c) SSAP (d) PASS
5. Fire Bucket Bottom Shape
- (a) Hemisphere (b) Rectangular
(c) Circular (d) Cone
6. _____ type of extinguisher used for electrical fire.
- (a) CO₂ (b) Water
(c) Class C (d) Class D
7. Fire is Combination of _____.
- (a) Fuel, Heat, Oxygen
(b) Oxygen, Oxidation , Heat
(c) Petrol, Argon, CO₂
(d) Nitrogen Oxygen, Fuel
8. Colour of Fire Symbol
- (a) Blue (b) Brown
(c) Red (b) Black
9. Heat Transfer Method _____.
- (a) Conduction , Exothermic Convection
(b) Conduction, Convection, Radiation
(c) Radiation, fuel, Heat
(d) Fuel
10. Reducing the Oxygen _____.
- (a) Cooling (b) Starvation
(c) Blanketing (d) Chain Reaction

Section B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Briefly explain about mode of heat transfer.

Or

- (b) Write short note on Fire Safety in chemical Labs.

12. (a) Explain about Hazard classifications.

Or

- (b) Briefly explain about suitability of fire extinguisher.

13. (a) Write a short note on air sampling detectors.

Or

- (b) Explain about IR Flame detectors.

14. (a) Explain briefly about Underground static water tank.

Or

- (b) Write a note on maintenance of Fire hydrants.

15. (a) Explain the different types of exits.

Or

- (b) Briefly explain about Hot work.

Section C

(5 × 8 = 40)

Answer **all** questions.

16. (a) Write in detail about physical and chemical properties of Fire.

Or

- (b) Explain in detail about fire safety in High rise building.

17. (a) Explain in detail about fire extinguisher size and placement.

Or

- (b) Prepare checklist for Fire extinguisher maintenance.

18. (a) Describe in detail about Heat detector and smoke detector.

Or

- (b) Write in detail about Inspection and maintenance of Alarm system.

19. (a) Give outline about Fire hydrants.

Or

- (b) Explain the Water Supplies and pumping arrangements.

20. (a) Write briefly about Exit requirement.

Or

- (b) Explain in detail about Handlong and storage of Flammable and comburible liquid.

C-1445

Sub. Code

90712

P.G. DIPLOMA EXAMINATION, NOVEMBER 2023.

First Semester

Fire and Industrial Safety

INDUSTRIAL SAFETY MANAGEMENT

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. Worker not wearing the helmet _____
 - (a) Unsafe Act
 - (b) Unsafe Condition
 - (c) Accident
 - (d) Near Miss

2. Risk = Probability × _____
 - (a) Likelihood
 - (b) Severity
 - (c) Injury
 - (d) Damage

3. PPE suitable for eye protection _____
 - (a) Safety Helmet
 - (b) Safety Glass
 - (c) Safety Shoe
 - (d) Safety Gloves

4. Hand Protection used for Chemical work
 - (a) Neoprene Gloves
 - (b) Hard Leather Gloves
 - (c) Mesh Gloves
 - (d) Rubber Gloves

5. Ohms Law $V =$ _____
- (a) R/I (b) I/R
(c) IR (d) I/V
6. LOTO means
- (a) Lock Out Try Out
(b) Look Out Tap Out
(c) Lock Out Tag Out
(d) Look Out Try Out
7. Flammable Liquid means _____
- (a) Below 100 Deg Fahrenheit
(b) Above 100 Deg Fahrenheit
(c) Above 38 Deg Celsius
(d) None
8. Which one of the following chemical is irritant
- (a) Chlorine (b) Cadmium
(c) Sulphuric Acid (d) Petrol
9. How many chapters, schedules and forms available in Factories Act 1948
- (a) 8 chapters 2 schedules and 22 forms
(b) 10 chapters 3 schedules and 40 forms
(c) 20 chapters 4 schedules and 30 forms
(d) None of the above
10. ANSI means _____
- (a) American National Standard Institute
(b) African National State Institute
(c) American National State Institute
(d) Australian National Standard Institute

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Explain about Unsafe Work and Unsafe Act with example.

Or

- (b) Write about the Risk Assessment.

12. (a) Explain about the Head Protection.

Or

- (b) Explain about the Fall protection.

13. (a) Explain about the Effects of Electric Shock in human body.

Or

- (b) Explain about the safety procedures need to be followed in electrical work.

14. (a) Explain about LC 50 and LD 50.

Or

- (b) Explain about Labeling of chemicals.

15. (a) Explain about the Ventilation in Factories act 1948.

Or

- (b) Explain about the roles and responsibilities of safety officer.

Part C

(5 × 8 = 40)

Answer **all** questions.

16. (a) Briefly explain about Implementation of safety management system.

Or

- (b) Explain in detail about hierarchy of controlling the hazard with example.

17. (a) Explain in detail about Respiratory protection.

Or

- (b) Briefly discuss about eye and ear protection.

18. (a) Explain about LOTO and thaw a electrical permit.

Or

- (b) Explain about CPR.

19. (a) Explain about Material Safety Data Sheet.

Or

- (b) Explain about the safe transportation of hazardous chemicals and GHS symbols.

20. (a) Explain about the handling and storage of hazardous chemicals.

Or

- (b) Explain about welfare facilities for employees in BOCW act.